



## JC87 Rec'd PCT/PTO 2 8 FEB 2007 /

PATENT
Attorney Docket No.: 27656/37821

10/018437

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

| Applicant: Zangemeister-Wittke et al. | ) I hereby certify that this paper is being |
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|                                       | ) deposited with the United States Postal   |
|                                       | ) Service as first class mail, postage      |
| Serial No.: 10/018,437                | ) prepaid, in an envelope addressed to:     |
| ,                                     | ) Commissioner for Patents,                 |
|                                       | ) Washington, DC 20231 on this date:        |
| Filed: October 30, 2001               | )   |
| 1 nou. October 50, 2001               | )<br>)                                      |
|                                       | ) February 20, 2002                         |
| For: Oligonucleotide Derivatives      | )   |
| Directed Against Human bcl-xL         | )   |
| and Human bcl-z mRNA                  | } 11/2 Sh                                   |
| Group Art Unit: TBD                   | ) Jeffrey S. Sharp                          |
|                                       | ) Registration No. 31,879                   |
| Examiner: TBD                         | ) Attorney for Applicants                   |
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## INFORMATION DISCLOSURE STATEMENT PURSUANT TO 37 C.F.R. §§ 1.56, 1.97, AND 1.98

Commissioner for Patents Washington, D.C. 20231

Sir:

In compliance with 37 C.F.R. §1.97 and the continuing duty of disclosure under 37 C.F.R. §1.56, the applicants call to the attention of the examiner the enclosed publications, as listed on the attached Form PTO-1449, which may be considered material to the examination of the above-identified patent application.

Documents A1, B1-B5 and C1-C7 were cited in the international search report of counterpart international patent appl. no. PCT/EP00/03708 (document C8 on the enclosed Form PTO-1449).

This information disclosure statement is not intended to be an admission that a search has been made, that other relevant art does not exist, or that any of the information

disclosed herein constitutes prior art under 35 U.S.C. §102 or 35 U.S.C. §103.

This information disclosure statement is submitted before receipt of a first official action on the merits and consequently should be considered by the Patent Office without payment of a fee [see 37 C.F.R. §1.97(b)]. However, should the Patent Office determine that a fee is due for consideration of this information disclosure statement and accompanying publications, the Patent Office is hereby authorized to charge said fee to Deposit Account No. 13-2855. A duplicate of this paper is enclosed.

Respectfully submitted,

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By:

Jeffrey S. Sharp

Reg. No.:31,879

February 20, 2002

Form PTO-1449 (Modified)



U.S. Department of Commerce Patent and Trademark Office Atty. Docket N 27656/37821

Serial No. 10/018,437

Applicant

Zangemeister-Wittke et al.

Filing Date Group
October 30, 2001 To b

To be assigned

## INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

| U.S. PATENT DOCUMENTS |    |                    |               |                  |       |          |                            |
|-----------------------|----|--------------------|---------------|------------------|-------|----------|----------------------------|
| *Examiner<br>Initials |    | Document<br>Number | Issue<br>Date | Name             | Class | Subclass | Filing Date If Appropriate |
|                       | A1 | 5,470,974          | 11/28/95      | Summerton et al. | 544   | 118      |                            |

| FOREIGN PATENT DOCUMENTS |    |                    |                     |         |       |          |     |          |
|--------------------------|----|--------------------|---------------------|---------|-------|----------|-----|----------|
|                          |    |                    |                     |         |       | Translat |     | ıslation |
| *Examiner<br>Initials    |    | Document<br>Number | Publication<br>Date | Country | Class | Subclass | Yes | No       |
|                          | B1 | WO 95/08350        | 03/30/95            | PCT     | A61K  | 48/00    |     |          |
|                          | B2 | WO 95/31470        | 11/23/95            | PCT     | C07H  | 21/02    |     |          |
|                          | В3 | WO 98/18812        | 05/07/98            | PCT     | C07H  | 21/04    |     |          |
| i                        | B4 | WO 00/01393        | 01/13/00            | PCT     | A61K  | 31/70    |     |          |
| L                        | B5 | WO 00/20432        | 04/13/00            | PCT     | С07Н  | 21/04    |     |          |

|    | OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)   |
|----|--|
| C1 | Gautschi et al., "Potent Anti-tumor Activity of a BCL-2/BCL-XL Bispecific Antisense Oligonucleotide Against Solid Tumors of Diverse Histological Origin," Proceedings of the American Association for Cancer Research Annual, 41:642 (2000) abstract # 4077. |

| EXAMINER | DATE CONSIDERED |
|----------|-----------------|
|          |                 |

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-1449 (Modified) FEB 2 8 2002 **INFORMATION** URE STATEMENT

U.S. Department of Commerce Patent and Trademark Office

Atty. Docket N 27656/37821 Serial No. 10/018,437

Applicant

Zangemeister-Wittke et al.

Filing Date

Group

(Use several sheets if necessary)

October 30, 2001

To be assigned

|   | OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.) |  |  |  |  |
|---|--|--|--|--|--|
|   | C2   | Luedtke et al., "Antisense Oligonucleotides Targeting Sequences Shared by the Bcl-2 and Bcl-xL Efficiently Downregulate Expression of Both Proteins and Induce Apoptosis of Lung Cancer Cells," Proceedings of the Annual Meeting of the American Association for Cancer Research, US, Philadelphia, 38:170 (1997) abstract #1140. |  |  |  |
|   | C3   | Luedtke et al., "Antisense Oligonucleotides Targeting Sequences Shared by the Bcl-2 and Bcl-xL Efficiently Downregulate Expression of Both Proteins and Induce Apoptosis of Lung Cancer Cells," Proceedings of the Annual Meeting of the American Association for Cancer Research, US, Philadelphia, 39:417 (1998) abstract #2838. |  |  |  |
|   | C4   | Obika et al., "Properties of Novel Oligonucleotide Analogues Containing an Acylic Nucleoside and a Carbamate Linkage," Bioorganic & Medical Chemistry Letters, 6:1357-1360 (1996).   |  |  |  |
|   | C5   | Zangemeister-Wittke et al., "Bcl2 Antisense Oligooxynucleotide 2009 Synergizes with Chemotherapy on Lung Cancer Cell Lines and has Antitumor Activity against Lung Cancer Xenografts," Proceedings of the American Association for Cancer Research Annual, 39:417 (1998) abstract #2839.   |  |  |  |
|   | C6   | Zangemeister-Wittke et al., "Synergistic Cytotoxicity of bcl-2 Antisense Oligodeoxynucleotides and Etoposide, Doxorubicin and Cisplatin on Small-cell Lung Cancer Cell Lines," British Journal of Cancer, 78:1035-1042 (1998).   |  |  |  |
|   | C7   | Zangemeister-Wittke et al., "Novel Approaches to the Treatment of Small-cell Lung Cancer," Cell. Mol. Life Sci., 55:1585-1598 (1999).  |  |  |  |
| ( | C8   | International Search Report, International Application No.: PCT/EP00/03708, International Searching Authority/ European Patent Office.   |  |  |  |

| EXAMINER | DATE CONSIDERED |
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<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.